- INTRODUCTION

On March 12, 1999, Bay State Gas Company ("Bay State" or "Company"), pursuant to G.L. c. 164, § 94, filed proposed tariffs with the Department of Telecommunications and Energy ("Department") that would terminate the demand-based tariff schedules for its largest ("Extra High Annual") sales and transportation customers (respectively, Rates G-43, G-53 and Rates T-43 and T-53) (collectively referred to as Rates "G/T-43, G/T-53").[(1)] This filing also would modify the tariffs for the High Annual sales and transportation customers (respectively, Rates G-42, G-52 and Rates T-42, T-52) (collectively referred to as Rates "G/T-42, G/T-52") to include all customers consuming more than 40,000 therms per year.[(2)] The Department suspended the tariffs until November 1, 1999 for further investigation and thereby docketed the matter as D.T.E. 99-34.

Pursuant to notice duly issued, the Department conducted a hearing at the Department's offices on April 15, 1999. The Department granted the petition for leave to intervene filed by the Commonwealth of Massachusetts Division of Energy Resources ("DOER").[(3)] In support of its filing, Bay State presented the testimony of Paula A. Strauss, senior rate analyst. The evidentiary record consists of one exhibit and twenty-seven responses to record requests.

II. DESCRIPTION OF THE COMPANY'S PROPOSAL

Bay State stated that its proposal to terminate G/T-43 and G/T-53 and modify G/T-42 and G/T-52 is revenue neutral and that its primary reason for terminating the demand-based rates G/T-43 and G/T-53 is the negative feedback received since their introduction in May 1997 (Exh. BSG-1, at 1-2). The Company claimed that the introduction of the demand-based rates has not encouraged natural gas use but instead, to some extent, encouraged the use of alternative fuel, thereby hampering the Company's efforts to increase load growth (id. at 1-2). The Company added that the demand-based structure of rates makes it difficult for the Company to advise existing and prospective customers of their projected energy costs (id. at 2).

In support of its proposal, the Company described: A. the background and design of the demand-based rates; B. the process of rate implementation; C. customer feedback and survey results; and D. load factor and customer-specific bill impacts. These items are briefly described below:

A. BACKGROUND AND DESIGN OF RATES G/T-43 AND G/T-53

The Company stated that Rates G/T-43 and G/T-53 were approved effective May 1, 1997, pursuant to an Offer of Settlement ("Settlement") in the Company's last rate case, Bay State Gas Company, D.P.U. 95-104 (1995) (id., exh.1, at 3-4). The Company noted that the Settlement, entered into among Bay State, the Attorney General, DOER, Enron and Utiliticorp, provided that Bay State establish demand-based rates for its commercial and industrial customers with annual consumption in excess of 250,000 therms (id., exh. 1, at 3).[(4)] According to the Company, Rates G/T-43 and G/T-53 were developed on a revenue neutral basis pursuant to the Settlement using test year data for the 12-month period ending January 31, 1997 (id. at 3-4).

The structure of charges for Rates G/T-43 and G/T-53 include a customer charge, peak and off-peak demand charges, and peak and off-peak volumetric charges (id., exh. 1, at 4, Tariffs, M.D.T.E. Nos. 510, 518, 514, 522). The customer charges, seasonal demand charges, and seasonal volumetric charges are identical for all the four rate classes (G-43, T-43, G-53, T-53) (Exh. BSG-1, Tariffs, M.D.T.E. Nos. 510, 518, 514, 522). The Company stated that monthly customer charges were set to recover the marginal customer costs (Exh. BSG-1, exh. 1, at 4). The Company added that the demand and volumetric charges were set at the same level for Rates G/T-43 and G/T-53 because "separately calculated rates were not significantly different" (id.).

The rates recover 30 percent of the Company's revenue requirement, net of customer charge revenues, from the volumetric charge component and the remaining 70 percent of revenue from the demand charge component (id. at 4).[(5)] The Company added that in designing rates, some winter revenues, based on costs allocated by season, were moved for recovery in the summer period (Exh. BSG-1, exh.1, sch.1, at 14; RR-DTE-4-6).

The Company claimed that customers, during educational meetings prior to rate implementation, generally favored the approach because it would lower winter bills and raise summer bills as an offset (Exh. BSG-1, exh. 1, sch.1, at 14). The Company, however, noted that at the meeting one customer strongly opposed this rate design approach because that customer burns little gas during winter and more gas during summer (id.).

B. RATE IMPLEMENTATION

The Company stated that the implementation and administration of Rates G/T-43 and G/T-53 required the installation of automatic meter reading ("AMR") devices (Exh. BSG-1, exh. 1, at 5).[(6)] Bay State added that it made enhancements in its customer information and billing systems to handle daily-metered information, trained its personnel, and developed educational materials and offered informational sessions to its large customers (id. at 5, sch. 1, at 8-12).[(7)]

Bay State stated that the rate implementation difficulties encountered, considered in isolation, are not justification to terminate the rates (Exh. BSG-1, exh.1, at 5). The Company, however, added that implementing the demand-based rates created incremental work and complications (id.). The Company claimed that concerns on accuracy of information and the use of new billing formulas required the Company to develop additional procedures to ensure accuracy of customer bills (id.). In the case of forecasting customers' bills, for example, Bay State noted that in the absence of sufficient historic daily data, it is difficult to estimate future daily gas usage (id. at 6).[8] The Company stated that until a daily consumption pattern is established, the temporary solution to the data problem has been to estimate a customer's bill using the applicable G/T-42 or G/T-52 rate structure (id.). The Company noted that this estimation method is deficient because it implicitly assumes that the customer's load factor will be similar to the average load factor for the entire group of customers (id.). The Company stated that these complications would be avoided if the demand-based rates are terminated (id. at 5-6).

C. FEEDBACK AND RESULTS OF CUSTOMER SURVEY

The Company claimed that the bill estimation problems, in the case of customers without sufficient history of daily use, served as a barrier to marketing gas delivery service to potentially new large volume customers (Exh. BSG-1, exh.1, at 7).[9] The Company stated that although a few customers were interested in monitoring their daily usage in an effort to lower their peak requirements, other customers' daily use is controlled by "other market forces" (id.). The Company added that, due to the monthly demand charges, some customers, who need to close their facilities for summer or holidays, would still be paying for an entire month of demand charges even if their facilities were closed for one or two weeks in a given month (id.).

The Company stated that some dual-fuel customers realize that the demand-based rates provide them an opportunity to shave their peak load with an alternative fuel (id. at 8). The Company, however, noted that for some other dual-fuel customers, demand-based pricing structure limited their flexibility to switch between gas and oil (Tr. at 53-54). More specifically, if a dual-fuel customer elects to burn gas for a single day, based on a comparison of daily prices of oil and gas, that customer will be "trapped" into burning gas for the remaining days of the month because of demand charges paid for the entire month (Exh. BSG-1, exh 1, at 8).[10]

The Company reported the results of two customer surveys performed during the summer of 1998 and in January 1999 (id., exh. 1, sch. 1, at 46-98, sch. 2, at 1-19). The Company stated that out of the total of 25 customers who responded to the surveys, six customers opposed the termination of the demand-based rates (Tr. at 66).

D. LOAD FACTOR AND BILL IMPACTS

Based on each customers' monthly therm and peak day use during the first year of implementation (May 1997 through April 1998) of the demand-based rates, the Company calculated the load factor of each of the 70 customers included in the analysis (Exh. BSG-1, exh. 1, sch. 1, at 100-104). The Company also calculated the test year (12-month period ending January 31, 1997) load factors for a total of 29 customers, for which data were available, and compared them with the first year implementation load factors indicating that the average load factor for those 29 customers increased from 0.6956 to 0.7211 (Exh. BSG-1, exh. 1, sch. 1, at 106).[11]

Using the actual usage data of each of the 70 customers served under the demand-based rates during the first year of implementation, the Company compared each customer's total bill to the total bill had the customer been billed under the existing G/T-42 and G/T-52 volumetric rates (Exh. BSG-1, exh. 1, sch. 1, at 107-113).[(12)]

The Company indicated that during the first year of rate implementation, the total bills for the 70 customers increased by $118,723 or by 0.58 percent compared with the customers' bills had they remained under the G/T-42 and G/T-52 volumetric rates (id. at 112-113).[(13)] The Company noted that if these customers were returned to the G/T-42 and G/T-52 rates, the bill impacts would be the same magnitude but in the opposite direction, assuming the same level of usage (Exh. BSG-1, exh. 1, at 13). The Company stated that for the total of 70 customers, 41 are expected to receive decreases and 29 customers are expected to have increases in annual bills from switching back to volumetric rates (id.).

Based on the customer surveys and feedback, the Company indicated that a total of 14 customers specifically requested to return to the volumetric rates, ten of whom have bills that increased, while a total of six requested to remain on the demand-based rates (Exhs. DTE-1-11, DTE-1-12, DTE-RR-4-4a, DTE-RR-4-4b). In the case of the customer who wrote Bay State opposing the termination of the demand-based rates (International Metal Products Corporation),[(14)] the Company argued that the benefit that the customer claimed to have realized will not be totally lost because more than 70 percent of the customer's total bills is comprised of gas costs (Tr. at 22-23).).[(15)]

III. THE COMPANY'S POSITION[(16)]

The Company objected to the idea of making the G/T-43 and G/T-53 demand-based rates optional on the grounds that it would violate revenue neutrality (Exh. DTE-1-17; Tr. at 70). The Company claimed that in D.P.U. 95-104, all parties agreed to the development of demand-based rates on a revenue neutral basis and that the Company would have not agreed to this rate design change if it were aware that it would result in a future rate change that would not preserve revenue neutrality (id.). The Company added that allowing customers to choose between the existing G/T-42/52 and G/T-43/53 rates would cause a net revenue loss of $28,202 (id.; Tr. at 66-67; DTE-RR-4-7). The Company indicated that it structured its filing as a "yes/no" proposal and that anything different, such as a redesigned

rate structure, could exacerbate the problems encountered and violate revenue neutrality (Tr. at 70).

The Company stated that it "is simply seeking to undo what it did in 1997" (id. at 68). The Company noted that it entered into an agreement with several parties in D.P.U. 95-104 to try out the demand-based rates and after one year of data gathering filed a proposal, which the Department approved, to satisfy its commitment under the Settlement and go forward with "the experiment" (id.). The Company claims that it tried to accomplish two things with the demand-based rates: (1) increase customers' satisfaction by allowing them to adjust their loads and reduce overall bills; and (2) from the

Company's perspective, increase revenues, which Bay State claims to be "the key to the LDCs' operations and staying out of rate cases"

(id. at 69).

The Company, however, claimed that the record in this proceeding indicates the opposite of what the Company expected (id.). The Company claims that in fact the "experiment" was not successful because customers, taken as a whole: (1) did not like and embrace the rates; (2) did not increase their gas usage but instead some customers switched to oil; and (3) found the rates difficult to deal with (id.). The Company claims that after two years of study and rate implementation, it encountered difficulties with the rates, especially under increased competition in the energy markets and therefore proposed to terminate those rates (id.).

IV. ANALYSIS AND FINDINGS

In approving the Settlement in D.P.U. 95-104, the Department stated that: "it carefully reviewed the rate structure provision of the Settlement in the light of the Department's policies and the evidence contained in the record," noting that the Settlement satisfied its well-established rate structure goals of efficiency, simplicity, continuity, fairness, and earnings stability. D.P.U. 95-104, at 15, citing, Massachusetts Electric Company, D.P.U. 95-40 (1995); Cambridge Electric Light Company, D.P.U. 92-250 (1993); Boston Gas Company, D.P.U. 93-60 (1993).

Rates G/T-43 and G/T-53 were established pursuant to the terms of the Settlement approved in D.P.U. 95-104. More specifically, the Settlement specified that the Company would establish two additional rate classes for the very largest sales and transportation customers for implementation on May 1, 1997 (Settlement at 4). In addition, the Department notes that Appendix C to the Settlement sets the detailed specifications, including the rate designations, of these new rate classes.[17] The Department, therefore, rejects the Company's claims that the establishment of those rates was merely an experiment.

In proposing to eliminate Rates G/T-43 and G/T-53 and place the customers in those rates under Rates G/T-42 and G/T-52, respectively, the Company, has proposed to consolidate Rate G/T-43 with Rate G/T-42 and Rate G/T-53 with Rate G/T-52. The Department's precedent in rate reclassification is well-established. More specifically, the Department has stated that:

[i]n determining whether to consolidate or disaggregate customers into new rate classes, the Department has specified that rate classes should be defined on the basis of differences in the cost of service. The Department has also found that, for gas utility customers, differences in cost are primarily a function of customer load level and load pattern. Boston Gas Company, D.P.U. 84-236-A, p. 11 (1986). The critical consideration in developing rate classes is that individual customers should be grouped so that the rates

they are paying are reasonably representative of the costs of serving them. Boston Edison Company, D.P.U. 1720, p. 136 (1984).

Boston Gas Company, D.P.U. 88-67, Phase II, at 18 (1989).

In the past, the Department has specified that, for determining appropriate rate classes, it is necessary to evaluate the difference in unitized embedded costs and unitized marginal costs between rate classes. Boston Gas Company, D.P.U. 88-67, Phase II, at 19 (1989), citing Colonial Gas Company, D.P.U. 86-27-A at 72 (1988).[(18)] Although the Settlement approved in D.P.U. 95-104 did not specifically present calculations of unitized embedded and marginal costs for Rates G/T-43 and G/T-53, compared with those for Rates G/T-42 and G/T-52, the Department, as noted above, found those rates to be consistent with its rate structure goals.[(19)] In addition, the Department stated that:

A settlement agreement among the parties, however well wrought, does not alter in any way the Department's jurisdiction nor does it absolve the Department of its statutory obligation to conclude its investigation with a finding that a just and reasonable outcome will result. The Department has therefore reviewed the proposed settlement in light of that responsibility.

D.P.U. 95-104, at 15, citing Boston Edison Company, D.P.U. 88-28/88-48/89-100 (1989).

The record in this case shows that the Company has not provided sufficient evidence to support the proposed consolidation of Rate G/T-43 with Rate G/T-42 and Rate G/T-53 with Rate G/T-52. The record does not show that the costs to serve the customers in Rates G/T-43 and G/T-53 are similar to the costs to serve customers in Rates G/T-42 and G/T-52, respectively. More specifically, the Company failed to demonstrate that customers with annual usage of at least 250,000 therms would have the same unitized embedded and unitized marginal costs to serve with those customers whose annual usage range from 40,000 to 249,999 therms.

In the past, the Department has approved the use of demand charges in the structure of rates. Boston Gas Company, D.P.U. 88-67 (Phase II), at 34 (1988); Commonwealth Gas Company, D.P.U. 87-122-B at 5 (1989); Fitchburg Gas and Electric Light Company, D.P.U. 84-145-A at 114 (1985). In addition, the Department has addressed the issue of elimination of demand charges from the structure of rates and has consistently rejected such elimination. Western Massachusetts Electric Company, D.P.U. 86-280-A at 194-195 (1987), Western Massachusetts Electric Company, D.P.U. 85-270-A at 298-300 (1986). Based on the record in this case, the Department finds that the Company's proposal, to eliminate the existing demand-based Rates G/T-43 and G/T-53, is inconsistent with the terms of the Settlement. In addition, the Department is not persuaded by the Company's arguments to deviate from its well-established standard for rate reclassification and consolidation. Accordingly, the Department rejects the Company's proposal to eliminate those rates.

The Department, however, notes the many changes, including the deregulation of the electric and natural gas markets, that have occurred since 1995 when the Department approved the Settlement in D.P.U. 95-104 that provided for the establishment of Rates G/T-43 and G/T-53. If the Company deems it necessary to revise its existing rates, in order to better respond to the changing marketplace, then the Company may file revised rates addressing the concerns here expressed by the Department. In addition, such revised rates must be developed in a Company revenue neutral basis consistent with the provisions of the Settlement approved in D.P.U. 95-104 and the Department's Order in NIPSCO/Bay State Merger, D.T.E. 98-31 (1998).[(20)]

ORDER

Accordingly, after due notice, hearing and consideration, it is

ORDERED: That tariffs M.D.T.E. Nos. 537 through 540, filed by Bay State Gas Company on March 12, 1999 to become effective May 1, 1999 be and hereby are DISALLOWED; and it is

FURTHER ORDERED: That existing tariffs M.D.T.E. Nos. 509, 510, 513, 514, 517, 518, 521, and 522 shall remain in effect.

By Order of the Department,

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Janet Gail Besser, Chair

James Connelly, Commissioner

W. Robert Keating, Commissioner

Eugene J. Sullivan, Jr., Commissioner

Paul B. Vasington, Commissioner

Appeal as to matters of law from any final decision, order or ruling of the Commission may be taken to the Supreme Judicial Court by an aggrieved party in interest by the filing of a written petition praying that the Order of the Commission be modified or set aside in whole or in part.

Such petition for appeal shall be filed with the Secretary of the Commission within twenty days after the date of service of the decision, order or ruling of the Commission, or within such further time as the Commission may allow upon request filed prior to the expiration of twenty days after the date of service of said decision, order or ruling. Within ten days after such petition has been filed, the appealing party shall enter the appeal in the Supreme Judicial Court sitting in Suffolk County by filing a copy thereof with the Clerk of said Court. (Sec. 5, Chapter 25, G.L. Ter. Ed., as most recently amended by Chapter 485 of the Acts of 1971).

1. The tariffs proposed to be terminated are M.D.T.E. Nos. 510 (Rate G-43), 518 (Rate T-43), 514 (Rate G-53), and 522 (Rate T-53). Rates G/T-43 are available to a customer whose annual use is equal to or greater than 250,000 therms and whose peak period use is equal to or greater than 70 percent of total annual use (Exh. BSG-1, Tariffs, M.D.T.E. Nos. 510, 518). Rates G/T-53 are available to a customers whose annual use is equal to or greater than 250,000 therms and whose peak period use is less than 70 percent of total annual use (id., Tariffs, M.D.T.E. Nos. 514, 522).

2. The existing tariffs proposed to be modified are M.D.T.E. Nos. 509 (Rate G-42), 513 (Rate G-52), 517 (Rate T-42), 521(Rate T-52). Rates G/T-42 and G/T-52 are available to customers with annual use between 40,000 and 249,999 therms (Exh. BSG-1, Tariffs). The proposed modification allows customers from Rates G/T-43 and G/T-53, proposed to be terminated, to avail of the modified G/T-42 and G/T-52 rates.

3. DOER testified in support of the company's petition based on the filings and testimony provided at the hearing and offered no further comments throughout the proceeding.

4. Article II, § 2.3, at 4 of the Settlement provides that: "the Company will establish two additional rate classes for the very largest sales and transportation customers, for implementation by May 1, 1997."

5. The Company stated that it considered various percentage levels of revenue recovery through the volumetric charge, while observing the impact on customers bills, and determined that the 30/70 percent split of revenue recovery through the volumetric/demand charges strikes a balance among a number of factors including understanding and customer acceptance, market uncertainty, and customer bill impacts (Exh. DTE-1-1).

6. The Company claimed that two customers refused to provide the Company access to a telephone line due to the length of underground line required at the customers' site and one customer's telephone line required installation under a driveway causing an additional expense for the customer (Exh. BSG-1, exh. 1, sch., at 8).

7. The Company indicated that 70 customers, consuming more than 250,000 therms per year, were metered on a daily basis when the demand-based rates became effective on May 1, 1997 (Exh. BSG-1, exh.1, sch. 1, at 8). The cost of an AMR device, including the labor for installation, varies by customer size and premise with an average cost of $594

(id. at 9). The Company installed a total of 143 AMRs for 75 accounts at a total cost of $84,942 (Exh. DTE-1-15). The Company stated that the telephone installation and monthly maintenance costs are the responsibility of customers and that the Company has no information on the level of those costs (Exh. DTE-1-14).

8. Rates G/T-43 and G/T-53 provide that "[d]emand charges shall be calculated by applying the Demand Rate to the actual measured maximum gas day usage in the billing month" (Exh. BSG-1, Tariffs M.D.T.E. Nos. 510, 518, 514, 522).

9. Bay State claimed that: "last September, Bay State's sales department reported that three of the Company's large projects to add incremental load were 'going nowhere' due to the demand-based rates. The three projects . . . would have resulted in the addition of approximately 270,000 Mcf annually" (Exh. BSG-1, exh. 1, at 7-8).

10. Bay State provided copies of two letters from its demand-based customers. One customer, whose preferred fuel is natural gas, stated that the demand-based rates eliminated its flexibility to switch between gas and oil and, during the month of January 1998 alone, that customer paid a premium of over $1,000 per day for using natural gas (Exh. BSG-1, exh. 1, sch. 1 at 42-43). Another customer stated that it switched to oil from gas because of the unpredictable nature of its load that resulted in relatively high transportation charges under the demand-based rates (id. at 45). The Company noted that, before the implementation of the demand-based rates, this customer was burning oil only during the coldest months and using gas during the remainder of the year (Exh. BSG-1, exh. 1, at 9). The Company also provided a copy of the letter addressed to Bay State of one of the six customers who opposed the termination of the demand-based rates (Exh. BSG-2).

11. The average load factor for the same 29 customers further increased to 0.7238 based on their volume and peak day usage that included more recent monthly data (Exh. DTE-1-9). The Company, however, claimed that statistically there was no increase in load factors (DTE-RR-4-2). The Company noted that any increases in load factors could not be attributed alone to the implementation of the demand-based rates (Tr. 37-38).

12. Of the 70 customers included in the analysis, 6, 11, 11, and 42 are served under Rates G-43, G-53, T-43, and T-53, respectively (Exh. BSG-1, exh. 1, sch. 1, at 100-102). As of May 1, 1998, the Company has 75 customers receiving service under the demand-based rates, 58 of whom being transportation customers (id. at 20). Five customers were not included in the data analysis because at the time the demand-based rates were implemented, the Company was not able to install the necessary AMR devices for those customers (id. at 8).

13. Of the 53 G/T-53 customers, 28 customers' one-year bills increased, ranging from 0.13 percent ($166) to 9.14 percent ($14,233); the remaining 25 customers' bills decreased, ranging from -0.05 percent ($246) to -2.04 percent ($6,186) (Exh. BSG-1, sch.1, at 112-113).

14. More specifically, the customer stated that it realized "significant benefit" under the demand-based rates through measures including: (1) restructuring evaporation schedule to "flat burn" each week; (2) negotiating a competitive interstate transportation rate with a marketer because of its ability to burn a consistent amount of gas each week and month; and (3) very low variance due to heating requirements (Exh. BSG-2).

15. The cost of gas as a percentage of total bill of customers ranged from 78.63 percent to 82.58 percent (DTE-RR-3-1).

16. Instead of filing a brief, the Company summarized its position at the evidentiary hearing.

17. Appendix C, at 1 of the Settlement provides that Rates G/T-43 would be available to a customer whose total winter use is greater than or equal to 70 percent of its annual use and that Rate G/T-53 would be available to a customer whose winter use is less than 70 percent of annual use. In addition, Appendix C provides that: "[t]he charges for the new classes G/T-43 and G/T-53 shall include a monthly customer charge, seasonal commodity rates and seasonal demand rates. Demand charges will be based on the actual measured maximum gas day usage in the billing month" (Settlement, App. C, at 1).

18. See, also, Western Massachusetts Electric Company, D.P.U. 93-64, at 3 (1993); Commonwealth Electric Company, D.P.U. 88-135/151, at 199-200 (1989); New England and Telephone Company, D.P.U. 86-33-C, at 25 (1987); Boston Edison Company, D.P.U. 85-266-A/85-271-A, at 236 (1986).

19. See, for example, Boston Gas Company, D.P.U. 88-67, Phase II, at 15, 18-19 (1989), where the Department approved the company's proposal for rate reclassification that included separate rate classes for the largest ("extra-large") commercial and industrial customers.

20. In D.T.E. 98-31, the Department approved the merger of Northern Indiana Public Service Company and Bay State that included a provision for a five-year base rate freeze starting November 1, 1999. The Department noted that Bay State "would retain the flexibility to propose revenue-neutral rate design changes." D.T.E. 98-31, at 12.